

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (cancelled)
2. (cancelled)
3. (previously presented) The wireless communication unit according to Claim 5, wherein the gain of said low frequency amplifier is arranged to be dependent upon a clip point of said dynamic compressor function.
4. (previously presented) The wireless communication unit according to Claim 3, wherein the gain of said low frequency amplifier is arranged to be dependent upon the clip point of said dynamic compressor function subtracted by the clip point of said analogue to digital converter.

5. (currently amended) A wireless communication unit incorporating a receiver, the receiver comprising:

radio frequency circuitry for receiving a radio frequency signal and converting said radio frequency signal to a low frequency signal;

a signal level adjustment circuit for receiving said low frequency signal;

an analogue to digital converter, operably coupled to said signal level adjustment circuit for receiving an adjusted low frequency signal and providing a digital received signal; and

a signal processor operably coupled to the analogue to digital converter for processing said digital received signal;

wherein said signal level adjustment circuit comprises a low frequency amplifier whose gain is arranged to be dependent upon a clip point of said analogue to digital converter, a dynamic compressor function, operably coupled to said low frequency amplifier for limiting a signal output from said low frequency amplifier, and a fixed attenuator operably coupled to said dynamic compressor function to attenuate at a fixed attenuation level a received signal output from said dynamic compressor function to below a clip point threshold of said analogue to digital converter.

6. (previously presented) The wireless communication unit according to Claim 5, wherein said fixed attenuator is arranged to be dependent upon a clip point of said analogue to digital converter.

7. (previously presented) The wireless communication unit according to Claim 5, wherein said fixed attenuator is arranged to be dependent upon a clip point of said dynamic compressor function.

8. (previously presented) The wireless communication unit according to Claim 17, wherein said fixed attenuator is arranged to be dependent upon the clip point of said dynamic compressor function subtracted by the clip point of said analogue to digital converter.

9. (previously presented) The wireless communication unit according to Claim 5, wherein said low frequency components are at an intermediate or baseband frequency.

10. (previously presented) The wireless communication unit according to Claim 5, wherein said receiver has a high dynamic range, for example in excess of 100 dB.

11. (previously presented) The wireless communication unit according to Claim 5, wherein said signal level adjustment circuit negates a need for an automatic gain control circuit.

12. (previously presented) The wireless communication unit according to Claim 5, wherein the wireless communication unit is a subscriber unit or a base transceiver station operating in a wireless communication system.

13. (previously presented) The wireless communication unit according to Claim 12 wherein the subscriber unit is one of a portable or mobile PMR radio, a mobile phone, a personal digital assistant, a wireless capable laptop computer.

14. (previously presented) The wireless communication unit according to Claim 5, wherein the received signal is a digitally modulated signal.

15. (previously presented) The wireless communication unit according to Claim 14, wherein the receiver is a linear receiver for receiving said digitally modulated signal.

16. (currently amended) A method of signal reception for a wireless communication unit, the method comprising:

receiving a radio frequency signal and converting said radio frequency signal to a low frequency signal;

adjusting the signal level of said low frequency signal;

analogue to digital converting the signal with an analogue to digital converter after said signal level adjustment step, thereby providing a digital received signal; and

signal processing of the said digital received signal;

wherein said adjusting the signal level comprises low frequency amplification with a gain arranged to be dependent upon a clip point of said analogue to digital converter, limiting a signal output from the low frequency amplification using a dynamic compressor function, and attenuating at a fixed attenuation level a signal output from the dynamic compressor function to below a clip point threshold of the analogue to digital converter, using a fixed attenuator.

17. (previously presented) The wireless communication unit according to Claim 6, wherein said fixed attenuator is arranged to be dependent upon a clip point of said dynamic compressor function.